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#### MFS to Enter Ameritech Turf Via Local Calls

#### DOCUMENT 7 OF 17

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Technology & Health

\* MFS to Enter

Ameritech Turf

Via Local Calls

By Gautam Naik

Staff Reporter of The Wall Street Journal

374 Words

3241 Characters

05/23/96

The Wall Street Journal

B3

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Ameritech Corp. moved one step closer in its plan to enter the

\* long-distance phone business by agreeing to let MFS Communications Co. sell local-phone services in the Bell's five-state region.

Ameritech hopes to take advantage of a recent telecommunications law that allows local and long-distance phone providers into each other's markets. But like other regional Bells, Chicago-based Ameritech must first prove that local-phone competition exists in its territory. The

- \* three-year pact allows MFS to sell local phone services to business and
- \* residential customers in Illinois, Indiana, Michigan, Ohio and
- \* Wisconsin.

Ameritech must satisfy several other points on a regulatory "checklist" before it can seek to capture a share of the \$8.5 billion in long-distance calls that originate within its region. The Bell is moving aggressively toward that goal. For instance, even though MFS mainly serves business customers, the companies' pact covers residential customers as well, which particularly benefits Ameritech.

"Ameritech is not so much interested in facilitating competitors but in meeting the checklist," said James Crowe, chairman of MFS, of Omaha, Neb. "Obviously, their agenda is different than ours."

MFS, which previously clashed with Ameritech over barriers to entry in the Bell's market, expects to offer local phone service to business customers in the states Ameritech serves in six to 12 months.

While MFS already sells local service in certain cities in Ameritech territory -- Chicago, Detroit, Cleveland and Indianapolis -- its latest pact is broader. MFS will be able to lease Ameritech's copper phone lines to reach prospective customers without also having to lease other facilities owned by the Bell, including expensive switching centers. Ameritech customers who choose to use MFS's service will be able to retain their phone numbers. The two carriers also agreed on rate parity:

Source: Wall Street Journal, May 23, 1996



Ameritech and MFS will pay each other the same amount for local calls made on one company's network but ending in the other's.

About 12 companies, including AT&T Corp. and MCI Communications Corp., are negotiating with Ameritech to set up similar interconnection agreements. "I'm ready to sign a deal with anyone," said Neil Cox, president of Ameritech's information industry services.

Ameritech said it hopes to meet the terms of the 14-point "checklist" and enter the in-region long-distance business late this year or early next year.

10607 \* End of document.

Source: Wall Street Journal, May 23, 1996

#### MFS Commun Files Arbitration Requests For GTE, ...

DOCUMENT 5 OF 17

DJ9620107811

\* MFS Commun Files Arbitration Requests For GTE, Sprint Pacts 167 Words 1894 Characters

07/19/96

13:17

Dow Jones News Service

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- \* OMAHA, Neb. (Dow Jones)--MFS Communications Co. (MFST) requested formal arbitration of interconnection arrangements with GTE Corp. (GTE) in Texas, Florida and Virgina, and Sprint Corp. (FON) in Florida and \* Illinois.
- \* In a press release, MFS Communications said it filed pleadings and supporting documentation with the appropriate state public utility commissions.

The arbitration requests cover all the basic elements of interconnection, including reciprocal compensation, interconnection architecture, unbundled local loops and number portability.

As reported, MFS Communications also filed for arbitration of the pricing of unbundled local loops in interconnection agreements with Bell Atlantic Corp. in Delaware, District of Columbia, New Jersey, Maryland, Pennsylvania and Virginia, and with Southwestern Bell Telephone Corp. in Missouri and Texas.

MFS Communications said it has filed similar requests for arbitration with state public utility commissions regarding U S West Communications Group service territories in Arizona, Colorado, Minnesota, Oregon, and Washington, as well as Bell South service territories in Florida and Georgia.

MFS provides business communication services. (END) DOW JONES NEWS 07-19-96
1:17 PM

I0607 \* End of document.

Source: Dow Jones News Service, July 19, 1996

#### MFS Commun In Local Co-Carrier Pact With Sprint ...

DOCUMENT 1 OF 17

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\* MFS Commun In Local Co-Carrier Pact With Sprint > MFST FON 130 Words 1548 Characters 09/30/96

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Dow Jones News Service

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- \* OMAHA, Neb. (Dow Jones)--MFS Communications Co. (MFST) reached local telephone service co-carrier interconnection agreements with Sprint
- \* Corp.'s (FON) divisions in Florida and Illinois.

Terms were not disclosed.

In a press release, MFS said key elements of the agreements include interconnection of the companies' networks; exchange of all local traffic at a fully reciprocal and identical rate per minute; and access to unbundled loops.

The agreements were reached in line with the pro-competitive provisions of the Telecommunications Act of 1996, according to MFS Communications.

MFS Communications owns and operates fiber optic networks in the Orlando, Fla., and Chicago metropolitan area served by Sprint.

The agreement in Florida states that loop rates and certain other rates will be set by state regulators through binding arbitration.

(END) DOW JONES NEWS 09-30-96 12:44 PM

I0607 \* End of document.

Source: Dow Jones News Service, September 30, 1996

MKS

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Until recently, the competitive world has adhered to an Abstract: 'us against them' mentality, with competitive carriers on one side and incumbent LECs on the other. But as local loops open up, it is clearly every carrier for itself. Though MFS Communications and Teleport Communications Group (TCG) are often lumped together as the most recognizable competitive access providers (CAP), MFS is a different company with different objectives. When MFS recently inked an interconnection agreement with Pacific Bell, other California competitive hopefuls cried foul. Many question the business sense behind the deal and fear Pac Bell will use the term to strongarm other carriers into accepting similar arrangements. MFS has agreed to compensate Pac Bell for local number portability, and each carrier will pay the other to terminate traffic that originates on the other's network. Pac Bell also is leasing services to its competitor at rates above that which the RBOC charges its customers.

## Vendors unite on standards

Denise Pappalardo East Coast Bureau Chief

n the never-ending business game of "my alliance is bigger than yours," IBM, 3Com and Bay Networks last week formed the Network Inter-operability Alliance and will invite others to join them in choosing standards to promote and expand their customers' networks.

The strategy is expected to strengthen the alliance members' competitiveness with Cisco, the San Jose-based internetworking giant, industry observers believe.

The alliance intends to clarify the swarm of standards and specifications by picking and choosing those standards and specs that the vendors' product lines will support. The alliance will choose from existing standards, not create its own, the companies' executives stressed.

"The best thing about standards is that there are so many to choose from, and the worst thing about standards is that there are so many to choose from," said Andy Ludwick, president and chief executive officer of Bay Networks, Santa Clara, Calif.

Although the alliance's initial focus is the local area network market, IBM, 3Com and Bay Networks hope to clarify the standards in the wide area network to create end-to-end solutions across the public network.

"The alliance is a very good thing," said Kimberly Lorencic, senior analyst at The Yankee Group, Boston. The alliance's efforts will help customers determine the products that fully interoperate within their networks, she said.

IBM's recent deal with Cascade might make the WAN switch manufacturer a likely Network Interoperability Alliance member, in addition to other WAN product manufacturers down the road. That's because equipment manufacturers see the public network as an area where money can be made.

Cisco's pending acquisition of StrataCom (Telephony, April 29, page 8) gives it a strong hold on some large carrier network customers such as AT&T. II

#### Numbers by the slice

TCG proposes divvying up the telephone number pie

Beth Snyder, Associate Editor-News

Access to local telephone numbers is an obvious need of any carrier seeking to compete in the local market. Carriers now receive the new telephone numbers, called NXX codes, in blocks of 10,000—all to be used in one geographic billing region.

But Teleport Communications Group has formulated a new plan. Under its proposal, TCG and others could take their 10,000-number ple and slice it up into 1000-number chunks to use across a state.

Though carriers could save on fees associated with each 10,000-number block, TCG's core argument involves number depletion. If a competitive access provider wants to enter the local market, it has to acquire 10,000 numbers when it may only have one customer in that billing area. That means 9999 numbers go unused.

Telephone number exhaustion is not only a hot topic these days but is quickly becoming a harsh reality.

in California, where the number of exchanges is expected to jump from 13 to 26 in the next five years, the Public Utilities Commission has already begun to act. The CPUC ruled in February that new entrants do not have to keep all their NXX codes in one rate center. Details are still being worked out as to how to continue accurate billing with this system. A CPUC-ordered work group is studying the TCG plan.

"it's important to realize all the encompassing issues, how many service providers will be affected and how much of the telecommunications network a

continued on page 26

ELEFOCUS



Shira McCarthy, Associate Editor-News

Ameritech and MFS Communications signed a five-state, threeyear interconnection deal last week, the first comprehensive, regionwide agreement inked between an incumbent local exchange carrier and competitive access provider.

The interconnection agreement meets all terms and conditions in

Sections 251 and 252 of the Telecommunications Reform Act of 1996, including the unbundling and sale of loop components, resolution of physical collocation issues and the adoption of a per-minute reciprocal compensation arrangement, said Neil Cox, president of Ameritech information Industry Services.

However, Ameritech hesitated to say this agreement would satisfy all the telecom act's requirements for facilities-based residential competition that Ameritech must fulfill before entering the long-distance market.

The agreement also provides for number portability, white pages listcontinued on page 8

#### AMERITECH'S DEALS

#### INTERCONNECTION:

MFS: Ohio, Wisconsin, Illinois, Indiana and Michigan

MCImetro: Ohio, Wisconsin

Teleport Communications Group: Wisconsin V Hancock: Indiana

#### RESALE:

U.S. Network: Illinois, Michigan and Ohio

MFS: Illinois CBG: Ohio rinance and operate private toil roads, bridges, water pipelines and treatment facilities.

The United venture grew out of Kiewit's extensive involvement in most of the major private infrastructure projects in the U.S. For example, it is prime contractor and an equity owner in the tour-lane private toll road being built in the middle of what is now State Road 91, connecting Riverside with Orange County, Calif. MFS is also involved in this project, as a provider of a wireless toll system that lets cars with prepaid accounts bypass toll booths.

Last year Kiewit and Bechtel formed United Infrastructure to design and invest in other private as well as partly private infrastructure projects. United quickly grabbed two projects. One, in the crowded Puget Sound area, is using a concept cailed congestion pricing,

whereby people using a highway during slack hours would pay lower or no tolls.

"Peak pricing occurs in the electric power, airline and hotel businesses," says United President Scott Miller, another of Scott's energetic young (40) executive/entrepreneurs. "Congestion pricing says you don't need to build more roads if you can distribute cars and trucks more evenly on a time basis." Arizona, California, Florida, Georgia, Minnesota, Virginia and Washington already have laws on the books to encourage this kind of pricing, and Colorado, New Jersey, New York and Pennsylvania are working on it.

It boils down to this: Kiewit sees change everywhere—in technology, in society, in government. In this change lies opportunity, and Kiewit, while remaining a top-notch construction firm, intends to seize some of these opportunities.

This worldwide enterprise is headquartered in the Kiewit Plaza building in downtown Omaha; Warren Buffett, in a modest office on the fourteenth floor, is the only other tenant. Scott and Kiewit Construction Group Chairman Kenneth Stinson spend much of their time doing what is only natural in a company that bets on people rather than on technology: evaluating employee performance.

Every year Stinson spends six weeks reviewing each employee's record with a team of managers and executives, identifying potential leaders and deciding whether employees should be invited to own stock.

The lucky ones don't get stock options. Instead Kiewit



Scott Miller of United Infrastructure Public works, private money.

helps them arrange bank loans to but the stock. When employees retire then can swap their C shares, which are tied to the core business, for D shares. which represent the diversified investments. Kiewit prices its shares once a year, based on year-end book value. But this value is seriously understated. For example, Kiewit carries its MFS shares, worth \$1.5 billion, at cost, or about \$500 million. Were Kiewit a truly public company, its shares would undoubtedly command a huge premium over book value, but Kiewit shareholders must content themselves with appreciation based on growth in retained earnings. (Scott says Kicwit could someday seil D stock to the public to give the stock some liquidity and to raise capital for new ventures.)

In allocating stock, as in so much else, Scott and Stinson want to know:

Did he or she sufficiently consider the downside, the safety factor in making decisions? As Ken Stinson purs in "We kind of focus on our mistakes instead of our successes."

Scott says almost the same thing but in different words. "I've always felt that if you had businesses that had good prospects and good people, you cover your downside and the upside covers itself. If the world falls apart, you still have a reasonable chance of coming out of it whole."

Nowhere is this emphasis on limiting potential lones more evident than in Kiewit's annual shareholders' meeting. Every January about a third of the shareholders come to Omaha from around the country and stay at a budget Red Lion Inn, two to a room. Highlight of the day: a presentation from the manager of the division that turned in the worst performance during the past year. "It's something no one looks forward to," says Peter Kiewit Jr., 68, a Phoenix attorney and Kiewit director. The purpose of this choice of speakers is more than merely didactic; it represents a kind of pillorying. Kiewit says pointedly: "Repetition is fairly rare."

Scott Miller, head of the new Kiewit/Bechtel venture United Infrastructure, attended his first annual meeting last January, a few months after joining United. He sat in the audience, somewhat shaken, as the first speaker of the day smeared himself with ashes. Later Walter Scott asked Miller what he thought of the presentations. Recalls Miller: "I told him, 'Walter, either we will do successful projects or we'll do none.' "

The best man won

WALTER SCOTT should have been, bur unfortunately was not, listed among The Forbes Four Hundred. His personal wealth is well in excess of \$300 million. It is mainly in Kiewit shares

plus big investments in local banks, oil and gas properties and ConAgra, Berkshire Hathaway and other stocks. Together he and buddy Warren Buffett own the Omaha Royals minor league baseball team.

Buffett, like his partner

Charles Munger, grew up in Omaha. He has known Scott most of his life—their mothers were friends. In high school, Buffert and Scott pursued the same girl, Carolyn Falk, but she matried Scott. "Unfortunately, the best man won,"

says Buffett C
Scott died in K
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tunnels.

October 18, 1993

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## Upstart claims it's li Ma Bell

### One-stop phone shopping

#### BY ROBERT McNATT

MFS Intelenet Inc. has unveiled a comprehensive new telephone service for small and medium-sized companies that could position it to dominate that fast-growing segment of the market.

The service, billed as the first one-stop phone shopping since the breakup of American Telephone & Telegraph Co., would provide customers with phone equipment, long distance and local telephone service all on one bill. Intelenet also claims it can save customers up to 9% on local calls, 33% on long distance calls and 41% on recurring line charges for local service.

#### Offers best rate

Intelenet offers customers the best rate among the major longdistance carriers. But ultimately, MFS wants to handle all calls on its own system, in essence recreating the pre-1984 ATT network.

"We are redefining telephone service as small and medium-sized businesses have known it," says Intelenet President Kirby Pickle. "We give these customers more and better, for less.

Intelenet, a Jersey City-based subsidiary of giant Oakbrook Terrace, Ill.-based MFS Communications Co., is small so far, with only 35 paying customers, and limited to Manhattan. But with the resources of the nation's largest competitive access provider behind it, the new service represents a serious threat to market leader New York Telephone Co. in the battle for the business customer with fewer than 250 phone lines.

MFS recently got a leg up in that market when state regulators declared it a co-carrier, meaning that it now carries the same status as New York Tel for regulatory purposes. Ultimately, it may be able to charge New York Tel for calls connecting to its own network.

Experts say Intelenet may have the ideal product for small busi-

nesses. "Companies want to look at one provider to take full responsi-bility for the system," says Walter Miao, a vice president at Link Resources, a Manhattan market research and consulting firm. think that they are on target because big companies can have a dedicated group to expedite problems, but not smaller companies.

Intelenet's plan bodes ill for New York Tel. Although it's still the largest provider of local phone service, New York Tel doesn't market products comparable with what MFS offers small and mediumsized businesses.

#### NY Tel can't offer long distance

It can't. By legal and regulatory fiat, New York Tel is barred from offering long-distance service. And it can't match Intelenet's local prices because it has to set its business rates high enough to help subsidize residential service.

The NYNEX Corp. subsidiary, which towers over MFS in size, professes a lack of concern. "MFS filed a tariff for this back in April and we did not oppose it," says a New York Tel spokesman. "That is an indication that we are not afraid of competition.

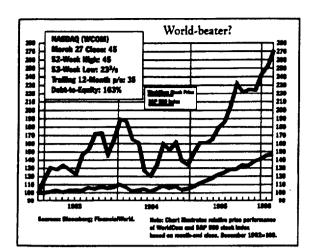
New York Tel currently serves its smallest business customers with two Small Business Centers in New York City. Medium-sized businesses receive assistance through

45 sales agents.

Officials at another major competitor, Staten Island-based Teleport Communications Group, say the company has no plans to move into the small business market. Instead, it's targeting customers in the middle-those with 300 to 1,000 phones.

"If you can satisfy the largest customers, you can satisfy the smaller ones," says Stuart Mencher, a Teleport senior vice president.

Intelenet, currently available only in Manhattan, is expanding soon into Northern New Jersey, Brooklyn and Queens.



## WorldCom by Joseph Epstein

## Private-Label Long Distance

WorldCom has become an instant hit with the Baby Bells since deregulation.

VorldCom is one of the early winners in telecom deregulation's Wild Wild West.

In just two months, the fourth-largest long-distance company has already signed agreements to supply long-distance services to GTE, Ameritech and SouthWest Mobile Systems and to provide data services to Electronic Data Systems. The GTE deal is especially attractive. Unlike the regional Bell operating companies (RBOCs), which must open up their local markets to competitors and go through a 14-point checklist to ensure fair competition before they can offer long-distance services, GTE is free to roll out long distance to its local areas immediately and is already offering that service to its customers in Michigan and Minnesota.

But what about AT&T, MCI and Sprint, the big three that dominate the long-distance in-

dustry with a collective market share of almost 90%? Well, aside from Bell Atlantic signing on with Sprint, so far they have been shut out.

Why? It seems that the RBOCs and other carriers are reluctant to enrich their future competitors, given that the long-distance companies are eager to enter the local phone business. Perhaps the RBOCs heard AT&T Chairman Robert Allen predict that Ma Bell will control up to 33% of the local phone business within the next five years.

And WorldCom's chief financial officer, Scott Sullivan, notes, "I don't think the RBOCs want to say that they are reselling the services of an AT&T or an MCI. With World-Com, they can brand their service [with their own names]."

According to Sullivan, what sets WorldCom apart is

WorldCom CFO Scott Sullivan (left), CEO Bernie Ebbers





FINANCIAL WORLD APRIL 22, 1996
52

photographs courtesy of WORLDCOM

that the company, unlike the big three, enables its resellers, including the RBOCs and GTE, to be more efficient in offering long distance by breaking up the longdistance phone call into its three parts: originating access, transport and terminating access. WorldCom's partners can price their services on a regional basis and be more competitive.

"[Resellers] will have exact control over their cost structure," says Sullivan. "We need to be specific about the pricing of our service. We cannot afford to offer an average-price service to an RBOC. Nor can an RBOC afford to have an average-cost vendor."

This is critical considering that PacTel. Nvnex and U.S. West. among others. have yet to ink long-distance deals and are looking for partners.

Investors have certainly been impressed with the company's accomplishments thus far, even though meaningful revenues from these deals won't kick in for two years. Its stock, which traded around 38 just before Congress passed the Telecommunications Act back in February, recently hit an all-time high of 45. And most analysts think it still has a lot more room to climb.

Besides the recent deals, Wall Street is also impressed with how much the lackson, Miss.-based company has grown, thanks to an aggressive acquisition binge. In the past four years revenues have swelled almost sixfold, to more than \$3.6 billion, while earnings have leaped more than seven times, to \$268 million. More important, with its acquisition of WilTel, WorldCom has gone from being a reseller of long-distance service to a company that owns its own national fiber-optic network, enabling it to capture approximately 4.5% of the long-distance market in 1995.

As a result, WorldCom's earnings per share are expected to jump 34% this year, to \$1.74, and another 25% in 1997, to \$2.17, according to Nelson's Investment Services. Compare that with the industry's stodgy 8%-to-10% growth rate.

ments. "It can make a more complete service offering to its customers than it has been able to do in the past, and that will lead to a more rapid rate of revenue growth," says Guy Woodlief, an analyst with Dean Witter.

Not had for a company few expected would still be independent. WorldCom is the former LDDS Communications.

satellite commu-

initially a small reseller of longdistance services that bought capacity from the big three. But LDDS began to buy up other longdistance resellers in mid-1987, including Metromedia's long-distance unit, which was closely held billionaire John Kluge.

With a 16% stake in LDDS, Kluge became the company's chairman in the fall of 1993. A little over a year later, it acquired IDB Communications Group, a nications company that gave the company a significant inter-

And none of these estimates factor in the new agree-

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national presence. In early 1995, LDDS bought WilTel, whose highly regarded nationwide fiber-optic network is one of only four in the country. LDDS then changed its name to WorldCom.

That's around the time some felt Kluge was dressing up the company for sale, possibly to an ambitious RBOC or other carrier. In fact, Bernie Ebbers, chief executive of WorldCom, had joked with analysts about going fishing when asked about long-term strategy. For a potential suitor, buying WorldCom would undoubtedly be cheaper than either trying to acquire MCI or Sprint or building its

#### THE WALL STREET JOURNAL BEC 1 0 1996

# MFS Will Offer Fast Internet Links Over Phone Wires

By JARED SANDBERG

Staff Reporter of THE WALL STREET JOURNAL.

NEW YORK — MFS Communications
Co. said it will offer low-cost high-speed
links to the Internet over conventional
telephone lines in a bid to lure away small
and medium-size business customers from
the giant Bell companies.

MFS, which competes with the Bells in selling phone and data services to businesses, said it will roll out its new Digital Subscriber Line service by early next year. It uses existing copper wires owned by the regional Bells, which have their own high-speed copper solution known as Integrated Services Digital Network, or ISDN.

Through its subsidiary, Internet-access provider UUNet Technologies Inc., MFS will initially provide business customers with high-speed connections to the global computer network that are equivalent to ISDN speed, or four times faster than prevalent 28.8 moderns. Ultimately, MFS, which is being acquired by long-distance player WorldCom Inc., will offer data transmission that is more than 20 times faster than conventional moderns. Yesterday, the Federal Communications Commission approved of WorldCom's acquisition plan.

High-speed access to the Internet over conventional phone lines has been the Holy Grail of the industry because home-computer users would be able to receive far more compelling information and entertainment, including graphics and sound files. Even ISDN is considered inadequate for delivering full-motion video.

James Q. Crowe, chairman and chief executive of MFS, said it would price the service below the \$50 to \$150 monthly fees that local phone companies currently charge for high-speed data links over conventional phone lines. Such discounting could threaten the Baby Bells in one of their key future-growth markets. But the Bells' higher-priced service hasn't been aggressively marketed and is proving expensive to provide. Pacific Telesis Group, for example, has been trying to raise its ISDN pricing.

The DSL technology MFS is employing uses copper wires to transmit digital bits rather than sounds, such as voices, which use only a fraction of copper wire's capacity. DSL and other digital solutions employ more efficient transmission schemes and make full use of copper wire's capacity.

MFS said it will bypass the telephone companies in much the same way it has with its telephone business — by installing its new DSL gear alongside equipment it already operates out of local network facilities owned by the Bells in 45 cities.



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October 24, 1994

\$4.00 (Canada \$4.50)

Walter Scotts Jr: of Peter Kiewit Sons', Inc.

An unchronicled success story on a simple principle: "Cover your downside and the upside will take care of itself."



What's in the Omaha water that the place breeds business geniuses like Charlie Munger, Warren Buffett and Walter Scott? Scott's brilliant leadership at Peter Kiewit Sons' is an untold saga worth telling.

## "We kind of focus on our mistakes"

By Gary Samuels

WARREN BUFFETT has a low opinion of many American business managements, but listen to this from the alltime champion investor: "An extraordinary record, and one that's largely unchronicled. It's a story of the lifetime or one man, Pete (Kiewit Sr.), who handed the baton to Walter [Scott], who's done a sensational job."

Though Buffett thinks enough of Walter Scott Jr. to have him on the board of Buffett's Berkshire Hathaway, the sage of Omaha owns no Peter Kiewit stock. He can't. Only current and retired Kiewit employees can. Of the 3,500 full-time employees, 1,150 own all the Class C shares; retirees are allowed to own Class D shares. Buffett probably wishes he could own some: The value of Kiewit's C stock rose 68% during 1992 and 1993, handily beating the S&P 500, which was up 18%.

Peter Kiewit Sons', Inc. is one of the biggest general construction firms in the U.S. Kiewit is extremely profitable, not just for a construction company, but for any business. In 1993 it earned net profits of \$261 million on total revenues of \$2.2 billion, returning 17.4% on C stock equity and 16.4% on D equity, far higher than industry averages. In size, nothing special, but this is a story about quality, not about quantity. It is a story about a splendid businessman who also thinks like an investor.

Peter Kiewit Sons' was founded 110 years ago by a Dutch immigrant brickmaker. The company soon saw a chance to expand into bricklaying and construction, and built brick firehouses, hotels, schools, smokestacks in Omaha during the early days of the century. Under the founder's son, Peter Kiewit Sr., who took over in 1931, it built canals, dams and power plants for Franklin Roosevelt's Public Works Administration; switched to munitions plants during World War II, and to interstate highways. Kiewit also began taking stakes in other businesses, often businesses like coal mining that it learned about through its contracting work.

This practice is not entirely new. Decades ago Electric Bond & Share designed and built power plants, raised the financing for them and took equity interests. Stone & Webster did, too. It is a style of investing based on acquiring industrial expertise and then using that expertise to identify related investment opportunities—the building, the financing and the investing all feeding each other. Few people



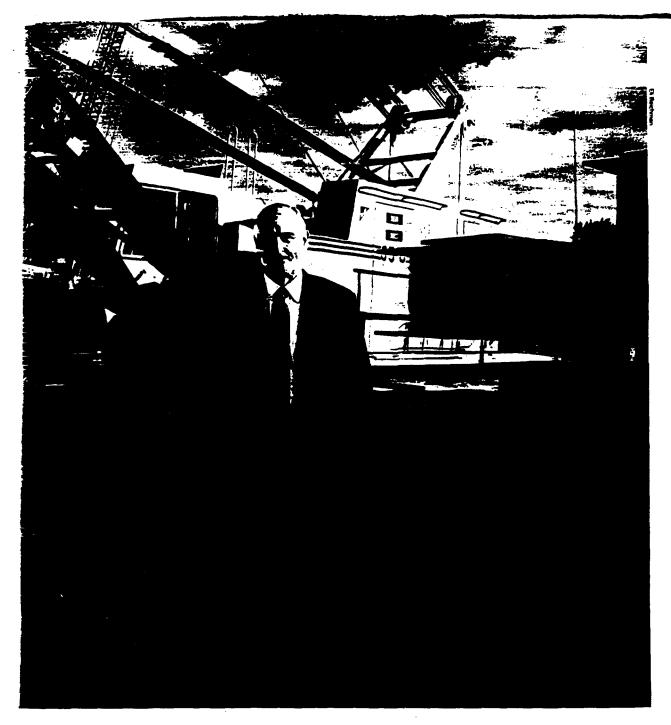
Walter Scott Jr. (right) and Kenneth Stinson "If the world falls apart, you still have a reasonable chance of coming out of it whole."

practice that art today. Walter Scott does.

Here's more of Buffett on Kiewit: "Pete's fit contracting, but he had a mind that understoes and Walter is the same way—he grew up in contracting loves it, but he likes and understands business."

Kiewit's core construction business still product the firm's revenues. Three recent big projects and million San Joaquin Toll Road in California; a \$18 underground highway leading to Boston's hard and the just completed Bonneville Lock and Dan Columbia River.

Most of the business is in government work business findprice incentive contracts. In these "hard money" contracts. Kiewit bids a fixed price and works hard to do the pop for less than the amount bid. "You get one chance in the contracting business to ask for your revenue, so really the research the



business is controlling cost," says Scott, who became chairman soon after Peter Kiewit Sr. died in 1979. That's the key to success in fixed-price contracts, where a single stumble can be immensely costly. It's a business where, after quality, cost control is the single most important factor in success.

In Kiewit's outside investments Scott has concentrated on two basic opportunities. One is telecommunications, where Kiewit has lots of construction expertise. It's a field that has become wide open since the federal government and changing technology pried open AT&T's longtime monopoly and around the same time virtually ended the local monopolies of power companies.

The second is in the general field of infrastructure—highways and the like. With taxpayers everywhere in revolt and government credit strained, private financing of infrastructure projects is spreading fast. Strategically placed to

take advantage of this powerful trend, Kiewit is investing heavily in it.

Under Scott, Kiewit has concentrated on four major outside investments. Since three of the companies are public, they offer a chance for outside investors to get a piece of Kiewit's talent.

The four companies are: \$141 million (1993 sales) MFS Communications, Inc., which provides phone services to businesses; \$284 million C-TEC Corp., an independent telephone and cable TV outfit; \$149 million California Energy Co., which builds and operates power plants here and overseas; and startup United Infrastructure Co., which is developing private toll roads and other public works projects.

MFS is a good example of how Scott operates. Like Buffett, Scott believes in betting on jockeys more than on horses. The jockey in MFS' case was a Kiewit executive named James



Crowe. In 1986 Crowe, then 36, had been put in charge of the Kiewit unit that had helped build national fiber-optic networks for each of the three major long distance phone companies. AT&T, MCI and Sprint. The business was winding down. Crowe was looking for related business that would keep his experienced telecommunications workers busy.

At that time several Chicago investors wanted Kiewit to build a fiber-optic network under Chicago's central Loop district. The investors figured they could sell backup phone lines and specialized phone service to big corporations, in competition with Illinois Bell, now known as Ameritech.

Crowe took the idea to Walter Scott, who, as much out of respect for Crowe as for anything else, said okay. He agreed to lend the investors the money to build the system, with the network itself collateral for the loan.

Encouraged by Scott, Crowe began to study the changes beginning to sweep the telephone business. Crowe saw a chance to do to the \$80 billion market that was locked up by the local Bell monopolies what MCI had done to AT&T. "The more I looked." he says, "the more convinced I became that what happened in the long distance business would happen in the local [telephone] business because of changes in technology and huge scale economics. The ticket to entry was going to go way down."

By mid-1987 the Kiewit board had okayed the formation of MFS (for Metropolitan Fiber Systems) Communications, which would begin building local fiber loops in downtown business districts. Eventually, Scott funded Crowe's MFS project with \$500 million of Kiewit's cash. This was and remains the largest single venture capital commitment ever made. A bold gamble? Only on the surface. The investment was to be made in small chunks, \$5 million or \$10 million at a shot. In 1990, when MFS bought the Chicago network that had launched the business, it was for \$30 million, mostly in deferred payments.

Every time he wrote a check, Scott asked himself: If our basic theory is wrong or if this thing turns out not to be our cup of tea, can we get out whole or nearly whole? As Scott puts it: "What I was looking at is, does this physical asset fit somebody else in case it doesn't fit us? We came to the conclusion that it would." If Kiewit couldn't use the wires, somebody else certainly could.

David Sokol of California Energy (below)
and David McCourt of C-TEC (right)
Bet the jockey, not the horse.

Bet the jockey, not the horse. then watch to be sure he doesn't make the same mistake twice.





That the escape hatch was open was shown in 1992, when British Telecom offered to buy Kiewit's MFS properties at a nice profit to Kiewit. Scott was tempted to sell but decided at the last minute not to. In May 1993 MFS sold 22% of its shares to the public for \$293 million. diluting Kiewit's position to 78%. But Kiewit hasn't cashed out a share: rather it bought 2 million shares at the offering price. Today, five years after MFS sent out its first phone bills, Kiewit's initial \$500 million investment in MFS is worth \$1.5 billion.

With its fiber networks now operating in 33 cities, MRS can handle just about any kind of business phone service. Since it is not a Bell company, MFS is free to be in the long distance business, and currently buys long distance service wholesale from AT&T, MCI and Sprint and sells it retail to business customers. Now MFS is preparing for an even greater opportunity in transporting data and video information for customers, thanks to changes in technology. Computer-to-computer calls are by far the fastest-growing segment of telecommunications and already account for the majority of calls in business. But the existing phone network is designed to carry voice conversations and is expensive for data calls.

A different technology called "packet switching" is a more efficient way for computers to exchange data. But packet switching has trouble with voices and video. A new packet technology called asynchronous transfer mode (ATM) solves those problems. Packet switching using ATM enabled Bear, Steams to move computers for its Manhattan trading operations from its high-rent Park Avenue headquarters 30 miles west to suburban Whippany, N.J. Data travels between Park



Avenue and Whippany at the superhigh speed of 2.5 billion bits of data a second.

This involves large savings. An investment bank or TV network that wants to tie ten cities together with highcapacity icased trunk lines now has to pay \$300,000 or so a month. But a network using ATM packet switching technology could accomplish the same goal for 5% to 10% of the cost of a circuit network, depending on usage. That would make videoconterencing and other multimedia services affordable to more business customers.

From its inception MFS focused only on business customers. Why not the consumer market as well? Again it was betthe-jockey time for Scott.

A voung Boston contractor named David McCourt had built MFS' fiber network in Boston. Later McCourt ended up as partner with Kiewit in McCourt/Kiewit International, which built residential cable TV/phone networks in the U.K. for cable operator Comcast: a joint venture of U S West and TCI; and Britain's Mercury Communications.

One day in 1992 aboard Kiewit's jet, McCourt told Scott he should think about competing against the Bell companies and cable monopolies in residential telephone and cable service. Scott liked the idea and he liked McCourt. Having dipped in as a contractor, Scott and McCourt learned enough to be able to tackle the business themselves. Scott told McCourt to find a company to buy that had the essential elements from which to build a residential telecommunications company. McCourt found C-TEC Corp., the nation's 20th-largest local phone company, which is also in the cable To and long distance husinesses (1993 revenues \$284) million). Kiewit bought voting control of C-TEC in mid-1993 for about \$200 million.

McCourt, 37, Joesn't want to talk much about his plans for C-TEC except to say that he's looking at ways to compete with the Bells for local residential service without having to buy cable systems, which have been getting more and more expensive.

One approach would be to help small cable operators sell consumers a package of local phone, long distance and cable TV service, using C TEC's expertise in phone billing and switching. Another approach would be to build networks in direct competition with high-cost phone or cable operators. McCourt is also looking at opportunities overseas. "I just got back from Mexico," savs McCourt. "You know, 70% of the world outside North America has no telephone service; 90% has no cable service."

Recentiv trading at 241/4 a share, C TEC is well below the 341/2 a share Scott paid for Kiewit's control block. But Scott isn't worried. "We got into it because we had the person. David [McCourt] basically had the idea and convinced us that he could make a success out of it. I believed it then, I believe it now."

As with communications, so in the energy field. Kiewit had gotten to know the garbage-to-energy business when that was not, and still wanted to get into the energy field. Scott had met David Sokol, 38, when the latter hired Kiewit to build garbage-to-energy plants for his employer, Ogden Projects, and brought him to Kiewit.

Sokol urged Scott to buy San Francisco-based California Energy, an independent power producer. Cal Energy owned half of a major geothermal power plant at the Navy's China Lake Naval Air Weapons Station in the Mojave Desert. Geothermal power plants take superheated water from wells thousands of feet below ground and then use the steam to turn turbines and generate electricity. But the company was a mess, with bloated management staff.

In 1991 Scott paid \$80 million for 34% of Cal Energy, right after its stock had crashed from 15 to 6 on the American Stock Exchange. Sokol chopped annual overhead from more than \$25 million to \$9 million and turned his attentions overseas.

He eyed the fast-growing economies in Southeast Asia and Latin America, requiring as they did massive amounts of new power. But many of these countries lacked the capital necessary. It was a ready-made situation for Kiewit, which could provide engineering, capital and operational knowhow. Sokol landed contracts for two privately owned geothermal plants and a hydroelectric plant in the Philippines and negotiated rights to develop two geothermal fields in Indonesia. In three cases, Kiewit ended up as a 50/50 equity partner with Cal Energy as well as contractor.

Cal Energy is trying to take over rival Magma Power, of San Diego, and just offered \$430 million in cash and stock for half the company. If the deal goes through Cal Energy will be one of the world's largest independent power producers. Kiewit now owns 43% of Cal Energy, worth \$270

million, more than twice what it invested.

Scott's newest is a joint venture (with construction giant Bechtel) called United Infrastructure Co. This 15-person operation based in Chicago's Sears Tower will design, build,